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EXAMINER

STEVENS, ROBERT

ART UNIT PAPER NUMBER

2176

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,453

Applicant(s)

JUNKERMANN, JENS B.

Examiner

Robert M. Stevens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-33 and 41-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-33 and 41-79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892).
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: RCE filed 9/21/2005 to the original application filed 10/18/2001 (provisionally filed 2/15/01 as 60/268,981) by Junkermann entitled "XML-Based Multi-Format Business Services Design Pattern".
2. The Office withdraws all previous rejections of the claims in light of the amendment.
3. The Office has issued new rejections of the claims under 35 U.S.C. 103(a), in light of the amendment. See the rationale given below.
4. Claims 21-33 and 41-79 are pending. Claims 21, 41, 51 and 64 are independent. Claims 1-20 and 34-40 have been canceled.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 21-33 and 41-79 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Burkett et al. (US Patent No. 6,635,089, filed Jan. 13, 1999 and issued Oct. 21, 2003,

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hereafter referred to as “Burkett”) in view of Allen (US Patent No. 6,658,625, filed Apr. 14, 1999 and issued Dec. 2, 2003, hereafter referred to as “Allen”).

Regarding independent claim 21, Burkett discloses:

A method of operating a business services application for retrieving data with delivery technologies (Abstract), the method comprising:

developing custom application code ... , the custom application code responsive to a request for data initiated by the delivery technologies; (Abstract in context of Fig. 2)

translating the request to a first document object model document ... ; (col. 3 lines 17-22)

selectively limiting the data structure of the first document object model document ... during the translation; (Fig. 10, col. 16 line 60 – col. 17 line 24)

executing the custom application code to retrieve data as a function of the first document object model document; (Abstract in context of col. 3 lines 17-22)

reading data into a second document object model document ... ; (col. 4 lines 36-38)

while the data is read in, selectively limiting the data structure of the second document object model document ... ; (Fig. 10, col. 16 line 60 – col. 17 line 24) and

translating the second document object model document ... as a function of the delivery technology. (col. 4 lines 21-50)

However, Burkett does not explicitly disclose:

...

... in a subclass of a BusinessService class, ... ;

translating the request to a first document object model document ... ;

... with a Message class and a Field class ... ;

... ;

... with the ApiService class;

... with the Message class and the Field class; and

... with the ApiService class

Allen, though, discloses:

...

... *in a subclass of a BusinessService class, ...* ; (col. 6 lines 35-61, Fig. 2, 3A and 3B)
... *translating the request to a first document object model document ...* ; (col. 6 lines 35-61, Fig. 2, 3A and 3B)
... *with a Message class and a Field class ...* ; (col. 6 lines 35-61, Fig. 2, 3A and 3B)
... ;
... *with the ApiService class*; (col. 6 lines 35-61, Fig. 2, 3A and 3B)
... *with the Message class and the Field class*; (col. 6 lines 35-61, Fig. 2, 3A and 3B) *and*
... *with the ApiService class ...* . (col. 6 lines 35-61, Fig. 2, 3A and 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 22, which is dependent upon claim 21, Burkett further discloses:

... *wherein selectively limiting the data structure of the first document object model comprises setting a plurality of text nodes within the first document object model document to a unit of data identified by a tag in the request.* (col. 4 lines 21-50)

Regarding claim 23, which is dependent upon claim 22, Burkett further discloses:

... *wherein selectively limiting the data structure of the first document object model further comprises limiting the unit of data to a predetermined datatype.* (col. 15 lines 4-17)

Regarding claim 24, which is dependent upon claim 23, Burkett further discloses:

wherein selectively limiting the data structure of the first document object model further comprises limiting the predetermined datatype to a string. (col. 15 lines 4-17)

Regarding claim 25, which is dependent upon claim 21, Burkett further discloses:

wherein selectively limiting the data structure of the first document object model comprises setting an attribute node within the first document object model document to an attribute identified by a request name parameter in the request. (col. 15 line 19 – col. 16 line 5)

Regarding claim 26, which is dependent upon claim 21, Burkett further discloses:

further comprising selecting, as a function of a mode debug flag, one of a short field name and a long field name for each of a plurality of fields in the first and second document object model documents. (col. 15 line 19 – col. 16 line 5)

Regarding claim 27, which is dependent upon claim 21, Burkett further discloses:

wherein translating the request comprises representing an input message with the first document object model document. (col. 4 lines 21-50)

Regarding claim 28, which is dependent upon claim 21, Burkett further discloses:

wherein reading data into a second document object model comprises representing an output message with the second document object model document. (col. 4 lines 21-50)

Regarding claim 29, which is dependent upon claim 21, Burkett further discloses:

wherein selectively limiting the data structure of the second document object model comprises setting, as a function of a datatype, a plurality of text nodes within the second document object model document to data read in to the second document object model document. (col. 15 lines 4-17)

Regarding claim 30, which is dependent upon claim 21, Burkett further discloses:

wherein selectively limiting the data structure of the second document object model comprises setting, as a function of a datatype, an attribute node within the second document object model document to all attribute read in to the second document object model document with the data. (col. 4 lines 16-50)

Regarding claim 31, which is dependent upon claim 30, Burkett further discloses:

wherein the attribute comprises an attribute name and an attribute value and selectively limiting the data structure of the second document object model further comprises limiting the attribute value to a predetermined datatype. (col. 12 line 36 – col. 13 line 32)

Regarding claim 32, which is dependent upon claim 21, Burkett further discloses:

wherein translating the second document object model comprises translating the second document object model document to extensible markup language text. (col. 4 lines 49-50)

Regarding claim 33, which is dependent upon claim 21, Burkett further discloses:

wherein translating the second document object model comprises translating the second document object model document to at least one of a hypertext markup language and a website meta language as a function of at least one extensible stylesheet language stylesheet. (col. 1 line 16 – col. 2 line 12, XSL being well known in the art)

Regarding independent claim 41, Burkett discloses:

A system for leveraging extensible markup language technology to provide an interface between a back-end systems layer and a front-end systems layer (Fig. 2), the system comprising:

a server computer; (Fig. 2 #47)

... class operable within the server computer to direct the translation of a request to an input message; (Abstract in context of Fig. 2 and col. 4 lines 16-50)

a document object model class operable within the server computer to represent the input message as a document object model document; (col. 4 lines 21-50)

... class operable within the server computer as wrapper of the document object model class to restrict manipulation and standardize the content of the document object model document; (Fig. 10 and col. 16 line 60 – col. 17 line 24) and

... class operable within the server computer to direct the execution of custom application code as a function of the input message. (Abstract in context of col. 3 lines 17-26)

However, Burkett does not explicitly disclose:

...
... ;
an ApiService ... ;
... ;
a Message class and a Field class ... ; and
a BusinessService

Allen, though, discloses:

...
... ;
an ApiService ... ; (col. 6 lines 35-61 and Fig. 2, 3A, 3B)
... ;
a Message class and a Field class ... ; (col. 6 lines 35-61 and Fig. 2, 3A, 3B) and
a BusinessService (col. 6 lines 35-61 and Fig. 2, 3A, 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 42, which is dependent upon claim 41, Burkett further discloses:

wherein the custom application code is operable to process the input message to retrieve data, the data translatable with the document object model class, the Message class and the Field class to an output message in the form of a document object model document with restricted manipulation and standardized content. (Abstract in context of col. 4 lines 16-50)

Regarding claim 43, which is dependent upon claim 42,

Burkett does not explicitly disclose:

wherein the ApiService class is operable to direct the conversion of the output message to a presentation format defined by the request.

Allen, though, discloses:

wherein the ApiService class is operable to direct the conversion of the output message to a presentation format defined by the request. (Abstract in context of col. 7 lines 50-61)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 44, which is dependent upon claim 41, Burkett further discloses:

wherein the input message and the output message comprises a root element and a plurality of sub-elements. (col. 3 lines 16-42)

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Regarding claim 45, which is dependent upon claim 41,

Burkett does not explicitly disclose:

comprising a Fldtypes class operable within the server computer, wherein the Fldtypes class comprises definitions of the format of datatypes for fields within the input message.

Allen, though, discloses:

comprising a Fldtypes class operable within the server computer, wherein the Fldtypes class comprises definitions of the format of datatypes for fields within the input message. (Abstract and col. 4 lines 28-62)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 46, which is dependent upon claim 41,

Burkett does not explicitly disclose:

wherein the document object model document comprises a plurality of field names, the field names selectable with a mode debug flag as one of a first field name and a second field name.

Allen, though, discloses:

wherein the document object model document comprises a plurality of field names, the field names selectable with a mode debug flag as one of a first field name and a second field name. (Abstract and col. 4 lines 28-62)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 47, which is dependent upon claim 46,

Burkett does not explicitly disclose:

wherein the first field name and the second field name are defined in a MESSAGEDEFINITION class operable within the server computer.

Allen, though, discloses:

wherein the first field name and the second field name are defined in a MESSAGEDEFINITION class operable within the server computer. (Abstract and col. 4 lines 28-62)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

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Regarding claim 48, which is dependent upon claim 41,

Burkett does not explicitly disclose:

wherein the document object model class comprises a Document class, a document object model Element class and a plurality of ProcessingInstruction classes, the Message class operable as a wrapper of the Document class, the document object model Element class and the ProcessingInstruction classes.

Allen, though, discloses:

wherein the document object model class comprises a Document class, a document object model Element class and a plurality of ProcessingInstruction classes, the Message class operable as a wrapper of the Document class, the document object model Element class and the ProcessingInstruction classes.
(Abstract and Fig. 2, 3A, 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 49, which is dependent upon claim 41,

Burkett does not explicitly disclose:

wherein the document object model class comprises a document object model setAttribute method, Field class operable as a wrapper of the document object model setAttribute method.

Allen, though, discloses:

wherein the document object model class comprises a document object model setAttribute method, Field class operable as a wrapper of the document object model setAttribute method. (Abstract and Fig. 2, 3A, 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 50, which is dependent upon claim 41,

Burkett does not explicitly disclose:

wherein the BusinessService class comprises a subclass of custom application code responsive to the request.

Allen, though, discloses:

wherein the BusinessService class comprises a subclass of custom application code responsive to the request. (Abstract and Fig. 2, 3A, 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

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Regarding independent claim 51, Burkett discloses:

A method of leveraging extensible markup language technology to interface a front-end systems layer and a back-end systems layer (Fig. 2), the method comprising:
receiving one of a plurality of predetermined requests initiated with any one of a plurality of delivery technologies; (Abstract and Fig. 2 in context of col. 3 lines 17-26)
converting the request to a plurality of fields based on request parameters included in the request; (Abstract in context of col. 3 lines 17-26)
limiting a datatype of data included in the fields to a predefined group of datatypes; (Fig. 10 and col. 16 line 60 – col. 17 line 24)
... ; and
...

However, Burkett does not explicitly disclose:

...
 ... ;
 ... ;
 ... ;
extracting the request parameters based on the datatype; and
accessing data responsive to the request based on the extracted request parameters.

Allen, though, discloses:

...
 ... ;
 ... ;
 ... ;
extracting the request parameters based on the datatype; (Abstract and col. 13 lines 27-67) and
accessing data responsive to the request based on the extracted request parameters. (Abstract and col. 13 lines 27-67)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to

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convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 52, which is dependent upon claim 51, Burkett further discloses:

wherein the datatype of data included in the fields is predefined by the request. (col. 4 lines 21-64)

Regarding claim 53, which is dependent upon claim 51,

Burkett does not explicitly disclose:

wherein the datatype of data included in the fields is loaded from a static declaration of the datatype included in a MESSAGEDEFINITION class.

Allen, though, discloses:

wherein the datatype of data included in the fields is loaded from a static declaration of the datatype included in a MESSAGEDEFINITION class. (Abstract and Fig. 2, 3A, 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 54, which is dependent upon claim 51, Burkett further discloses:

wherein converting the request comprises translating the request to XML structure that is limited to the predefined group of datatypes. (col. 3 lines 59-67 and col. 15 lines 4-67)

Regarding claim 55, which is dependent upon claim 51, Burkett further discloses:

converting the data responsive to the request into a plurality of fields with a data type that is limited to the predefined group of datatypes based on the request parameters, and translating the fields into a format indicated by the request to be compatible with the one of the delivery technologies that made the request. (Abstract, Fig. 2 and col. 4 lines 21-64)

Regarding claim 56, which is dependent upon claim 51, Burkett further discloses:

wherein converting the request comprises translating the request into a document object model document having a predefined name that is included in the request and a plurality of tags having attributes indicative of a corresponding datatype. (col. 4 lines 21-64)

Regarding claim 57, which is dependent upon claim 56, Burkett further discloses:

translating the data responsive to the request into another document object model document to represent an output message with datatypes that are limited to the group of predefined datatypes, and converting the another document object model into a format indicated by the request to be compatible with the one of the delivery technologies that made the request. (Abstract and col. 4 lines 21-64)

Regarding claim 58, which is dependent upon claim 51, Burkett further discloses:

wherein limiting the datatype comprises limiting the data to representation as one of integer, Boolean, string and group. (col. 15 lines 4-67)

Regarding claim 59, which is dependent upon claim 51, Burkett further discloses:

generating a structure for a response to the request in XML that includes the data responsive to the request, wherein in the response, the data responsive to the request is limited to the predefined group of datatypes. (col. 15 lines 4-67)

Regarding claim 60, which is dependent upon claim 51, Burkett further discloses:

wherein accessing data responsive to the request comprises limiting the data responsive to the request that is retrieved to representation as one of integer, long, Boolean, string and group. (col. 15 lines 4-67)

Regarding claim 61, which is dependent upon claim 51, Burkett further discloses:

converting the data responsive to the request to a plurality of fields based on a datatype of the data responsive to the request; (Abstract and col. 15 line 4 – col. 16 line 4)

limiting the datatype of the data responsive to the request included in the fields to one of a predefined group of datatypes; (col. 15 line 4 – col. 16 line 4) and

providing the data responsive to the request as a response. (col. 4 lines 16-24)

Regarding claim 62, which is dependent upon claim 51, Burkett further discloses:

wherein extracting the request parameters comprises executing custom application code that is responsive to a request name included in the request. (col. 4 lines 16-24)

Regarding claim 63, which is dependent upon claim 62, Burkett further discloses:

wherein executing custom application code comprises setting the root element to a message name as a function of the request name parameter. (col. 4 lines 16-24)

Regarding independent claim 64, Burkett discloses:

*An e-commerce architecture for providing a framework to interface delivery technologies with data (Abstract and Fig. 2), the e-commerce architecture comprising:
a server computer operable to execute instructions to convert a request to a first document object model document in an extensible markup language, the first document object model document comprising a plurality of request*

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parameters extracted from the request; (Abstract and Fig. 2 in context of col. 4 lines 16-64)

the server computer operable to execute instructions to restrict the conversion to the first document object model document to standardize the content and limit a manipulative capability of the extensible markup language ... ; (Abstract, Fig. 2 and Fig. 10 in context of col. 16 line 60 – col. 17 line 24)

the server computer operable to execute instructions to retrieve data responsive to the request and convert the data to a second document object model document in the extensible markup language based on the request parameters; (Abstract and Fig. 2 in context of col. 4 lines 16-64) and

the server computer operable to execute instructions to restrict the conversion of the data to the second document object model document to similarly standardize the content and limit the manipulative capability of the extensible markup language (Abstract, Fig. 2 and Fig. 10 in context of col. 4 lines 16-64 and col. 16 line 60 – col. 17 line 24)

However, Burkett does not explicitly disclose:

...
 ... ;
 ... *within a document object model class;*
 ... ; *and*
 ... *within the document object model class.*

Allen, though, discloses:

...
 ... ;
 ... *within a document object model class;* (col. 6 lines 35-61 and Fig. 2, 3A, 3B)
 ... ; *and*
 ... *within the document object model class.* (col. 6 lines 35-61 and Fig. 2, 3A, 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to

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convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 65, which is dependent upon claim 64, Burkett further discloses:

wherein the instructions to restrict the conversion of the first and second document object model documents further comprise instructions executable by the server computer to identify the first and second document object model documents with a predefined name included in the request. (Abstract, Fig. 2 and Fig. 10 in context of col. 4 lines 16-64 and col. 16 line 60 – col. 17 line 24)

Regarding claim 66, which is dependent upon claim 64, Burkett further discloses:

wherein the instructions to restrict the conversion of the first and second document object model documents further comprise instructions executable by the server computer to create a plurality of element nodes and populate a plurality of corresponding text nodes with the respective request parameters and the respective data. (col. 15 line 4 – col. 16 line 4)

Regarding claim 67, which is dependent upon claim 66, Burkett further discloses:

wherein the instructions to restrict the conversion of the first and second document object model documents further comprise instructions executable by the server computer to define a datatype of each of the text nodes from among a predefined group of datatypes. (col. 15 line 4 – col. 16 line 4)

Regarding claim 68, which is dependent upon claim 64,

Burkett does not explicitly disclose:

wherein the instructions to restrict the conversion comprises a Message class operable as a wrapper of a plurality of classes within the document object model class that include a document class and a document object model element class.

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Allen, though, discloses:

wherein the instructions to restrict the conversion comprises a Message class operable as a wrapper of a plurality of classes within the document object model class that include a document class and a document object model element class. (col. 6 lines 35-61 and Fig. 2, 3A, 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 69, which is dependent upon claim 64,

Burkett does not explicitly disclose:

wherein the instructions to restrict the conversion comprises a Field class operable: as a wrapper of a document object model setAttribute method in a document object model element class.

Allen, though, discloses:

wherein the instructions to restrict the conversion comprises a Field class operable: as a wrapper of a document object model setAttribute method in a document object model element class. (col. 6 lines 35-61 and Fig. 2, 3A, 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to

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convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 70, which is dependent upon claim 64, Burkett further discloses:

wherein the instructions to retrieve data responsive to the request are identified with a request name that is included in the request. (Abstract, Fig. 2 and Fig. 10 in context of col. 4 lines 16-64 and col. 16 line 60 – col. 17 line 24)

Regarding claim 71, which is dependent upon claim 21, Burkett further discloses:

wherein selectively limiting the data structure of the first document object model comprises standardizing the format of the document object model to be substantially similar for a similar request received from any one of the delivery technologies. (Abstract, Fig. 2 and Fig. 10 in context of col. 4 lines 16-64 and col. 16 line 60 – col. 17 line 24)

Regarding claim 72, which is dependent upon claim 71, Burkett further discloses:

wherein selectively limiting the data structure of the second document object model comprises standardizing the format of the second document object model to be compatible with any one of the: delivery technologies. (Abstract, Fig. 2 and Fig. 10 in context of col. 4 lines 16-64 and col. 16 line 60 – col. 17 line 24)

Regarding claim 73, which is dependent upon claim 72, Burkett further discloses:

wherein executing the custom application code comprises executing the same custom application code for a similar request from any one of the delivery technologies to provide a response. (Abstract, Fig. 2 and Fig. 10 in context of col. 4 lines 16-64 and col. 16 line 60 – col. 17 line 24)

Regarding claim 74, which is dependent upon claim 21, Burkett further discloses:

wherein executing the custom application code comprises executing the same custom application code for a similar request from any one of the delivery

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technologies. (Abstract, Fig. 2 and Fig. 10 in context of col. 4 lines 16-64 and col. 16 line 60 – col. 17 line 24)

Regarding claim 75, which is dependent upon claim 74, Burkett further discloses:

wherein while the data is read in, selectively limiting the data structure of the second document object model document comprises similarly limiting the second document object model in response to similar requests from any of the delivery technologies. (Abstract, Fig. 2 and Fig. 10 in context of col. 4 lines 16-64 and col. 16 line 60 – col. 17 line 24)

Regarding claim 76, which is dependent upon claim 41,

Burkett does not explicitly disclose:

wherein the Message class and the Field class are operable during representation of the input message as the document object model document to restrict manipulation of the document object model document.

Allen, though, discloses:

wherein the Message class and the Field class are operable during representation of the input message as the document object model document to restrict manipulation of the document object model document. (Abstract, col. 6 lines 35-61 and Fig. 2, 3A, 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

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Regarding claim 77, which is dependent upon claim 41,

Burkett does not explicitly disclose:

wherein the Message class is operable to restrict creation of, the element nodes and population of the corresponding text nodes and the Field class is operable to restrict the data types of text and attribute nodes included in the first document object model document.

Allen, though, discloses:

wherein the Message class is operable to restrict creation of, the element nodes and population of the corresponding text nodes and the Field class is operable to restrict the data types of text and attribute nodes included in the first document object model document. (Abstract, col. 6 lines 35-61 and Fig. 2, 3A, 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 78, which is dependent upon claim 41,

Burkett does not explicitly disclose:

wherein the Message class and the Field class are operable to limit a datatype of fields included in the document object model document to a predetermined group of datatypes.

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Allen, though, discloses:

wherein the Message class and the Field class are operable to limit a datatype of fields included in the document object model document to a predetermined group of datatypes. (Abstract, col. 6 lines 35-61 and Fig. 2, 3A, 3B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Allen for the benefit of Burkett, because to do so would have allowed a system designer to implement a data converter that uses the data description to determine how to convert the data, as taught by Allen in the Abstract. These references were all applicable to the same field of endeavor, i.e., use of tree processing techniques for data conversion.

Regarding claim 79, which is dependent upon claim 78, Burkett further discloses:

wherein the predetermined group of datatypes are selected from the group consisting of integer, long, Boolean, string and group. (col. 15 lines 4-67)

Response to Arguments

7. Applicant's arguments have been fully considered but they are not persuasive. It is noted that Applicant's amendments have changed the scope of the claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Non-patent Literature

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Hunter, Jason, et al., "Easy Java/XML Integration With JDOM, Part 1: Learn about a new open source API for working with XML", JavaWorld, May 2000, pp. 1-13 [downloaded from: www.javaworld.com/javaworld/jw-05-2000/jw-0518-jdom_p.html].

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Hind et al	6,941,459
Lindberg et al	6,732,109

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M Stevens whose telephone number is (571) 272-4102.

The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on (571) 272-4136. The current fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Additionally, the main number for Technology Center 2100 is (571) 272-2100.

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Robert M. Stevens
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Art Unit 2176
Date: December 10, 2005

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PRIMARY EXAMINER
12/11/2005